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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,887	01/16/2004	Shawn A. McAuley	BO1 - 0131US	6992
60483	7590	07/07/2006	EXAMINER	
LEE & HAYES, PLLC 421 W. RIVERSIDE AVE. SUITE 500 SPOKANE, WA 99201			RADI, JOHN A	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,887

Applicant(s)

MCAULEY, SHAWN A.

Examiner

John A. Radi

Art Unit

3641

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-16 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10, 12-16 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed April 10, 2006 have been fully considered but they are not persuasive.

With regard to the 102 rejection over Hart, US 6832540, due to a typographical error the examiner inadvertently directed your attention to 589a as opposed to 542a, which is the locking mechanism, see below for a further clarification. Examiner disagrees with applicant's argument that the locking mechanisms are "always touching the inner wall of the piston" and therefore not able to "move to a second position not engaging the piston." The claimed language is drawn to a "locking mechanism adapted to move into a first position engaging the piston when the actuator is locked and adapted to move to a second position not engaging the piston when the actuator is unlocked." The examiner believes that the locking mechanism (542a) is in a second position when unlocked (recessed in the groove 544c of strut 544), and therefore no longer engaging the piston regardless if they are still touching.

With regard to the 102 rejection over Marx, US 5379969, claims 5-8, the applicant argues that because the locking mechanism (LB) touches the piston (P) in the locked and unlocked position it is always "engaging" the piston and therefore doesn't read on applicant's claims. The examiner interprets the term "engage" differently, in which the two parts not only touch but are capable of transmitting energy to each other. In the unlocked position, while the locking bolt may still touch the piston, it no longer is capable of transmitting energy to the piston and therefore locking it, therefore it no longer engages the piston. In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies (i.e., locking mechanism and piston do not touch) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Hart (US 6832540).

Hart teaches a locking actuator comprising: a piston (512) adapted to be moved by a drive mechanism (538), the piston having a first end (left side) and a second end (right side), the second end being adapted to link to an apparatus (518) to be driven by the actuator, the piston defining a recess originating proximal the first end (512d); a strut (544) having a base (left side) and a tip (right side), the strut adapted to at least partially nest

within the recess (figure 6), the strut adapted to hold at least one locking mechanism proximal to the tip; and, at least one locking mechanism (542a, and fig 7a, 8a, 8b, 8c) held by the strut, the at least one locking mechanism adapted to move into a first position engaging the piston when the actuator is locked (fig 6) and adapted to move to a second position not engaging the piston when the actuator is unlocked (abstract and fig 7a).

With respect to claim 2, the drive mechanism is hydraulically pressurized (Hart abstract).

With respect to claim 3, the locking mechanism includes at least one locking key (542a) adapted to engage the piston when the actuator is locked.

Claims 1 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Marx et al. (US 5379969).

Marx teaches a locking actuator comprising: a piston (34) adapted to be moved by a drive mechanism (83, 82 acting on face 60) the piston having a first end (right) and second end (left), the second end being adapted to link to an apparatus (abstract, links to thrust reversers) to be driven by the actuator, the piston (34) defining a recess (lock bolt cavity 52, also labeled CB cylinder body); a strut (LP locking piston) having a base (right side) and a tip (left side), the strut adapted to at least partially nest within the recess (figure 8), the strut adapted to hold at least one locking mechanism proximal to the tip (lock bolt LB); held by the strut, the at least one locking mechanism adapted to move into a first position engaging the piston when the actuator is locked and adapted to move to a second position not engaging the piston when the actuator is unlocked (abstract).

With respect to claims 5 and 6 further comprising a shaft (PR) movably held within the strut (74), the shaft defining a ramp proximal the tip adapted to move the locking mechanism between locked and unlocked position (figures 8-13).

With respect to claims 7 and 8 wherein the locking piston is released hydraulically, see Abstract wherein "the locking piston (LP) includes a piston face (60) against which hydraulic fluid pressure may be directed, to move the locking piston (LP) axially, for retracting the bolt block (62) out from its position radially inwardly of the lock bolt or bolts (LB)..." With regard to the spring biasing the shaft, see (S) in figures 8, and 10. With regard to the second hydraulic cylinder to move within the shaft, see locking piston (LP) which moves within the strut (82).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hart (US 6832540) in view of Koizumi (US 6059228). Hart teaches the invention as taught with respect to claim 1 but doesn't teach wherein the locking mechanism engages the piston in an extended position. Koizumi shows that it is well known in the art to lock piston actuators in either the fully extended or fully retracted position as circumstance requires. It would have been a simple modification to Hart and within the skill of one skilled in the art at the time of invention to machine a matching groove in the distal end of the 510 which would cooperate with the locking bolts (542a) to lock the piston in a fully extended position.

Allowable Subject Matter

Claims 9, 10, 12-16, 26-28 are allowed. The prior art of record all failed to show either alone and/or in combination a locking piston actuator in which the locking mechanism is from within the movable piston by a shaft movable within a strut that engages a locking mechanism with the piston.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for a complete listing of prior art.

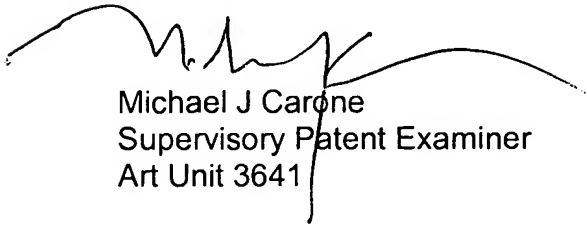
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Radi whose telephone number is 571-272-5883. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3641

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John A Radi
Patent Examiner
Art Unit 3641



Michael J Carone
Supervisory Patent Examiner
Art Unit 3641